Entergy

Corrected Copy

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Michael A. Krupa
Director
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CNRO-2003-00050

October 2, 2003

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555

SUBJECT: Entergy Operations, Inc.
Supplemental Information Pertaining to Relaxation Requests to NRC Order EA-03-009

Arkansas Nuclear One, Unit 2
Docket No. 50-368
License No. NPF-6

Waterford Steam Electric Station, Unit 3
Docket No. 50-382
License No. NPF-38

Dear Sir or Madam:

In various letters to the NRC staff, Entergy Operations, Inc. (Entergy) submitted relaxation requests to certain requirements of NRC Order EA-03-009 (the Order) for Arkansas Nuclear One, Unit 2 (ANO-2) and Waterford Steam Electric Station, Unit 3 (Waterford 3). Specifically, these requests are as follows:

1. Relaxation to the bare metal visual examination requirement per Section IV.C(1)(a) of the Order for ANO-2[1]

2. Relaxation to the ultrasonic examination requirements of Section IV.C(1)(b)(i) of the Order for the control element drive mechanism (CEDM) nozzles for ANO-2[2] and Waterford 3[3]

[1] Originally submitted via Entergy letter 2CAN050301 dated May 8, 2003 and supplemented via letters 2CAN060308 dated June 26, 2003, 2CAN080302 and 2CAN080303 both dated August 2, 2003, and 2CAN080306 dated August 27, 2003.

[2] Originally submitted via Entergy letter CNRO-2003-00033 dated August 27, 2003 and supplemented via letters CNRO-2003-00039 dated September 12, 2003 and CNRO-2003-00047 dated September 25, 2003.

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3. Relaxation to the ultrasonic examination requirements of Section IV.C(1)(b)(i) of the Order for the in-core instrumentation (ICI) nozzles for ANO-2[4] and Waterford 3[5]

On September 30, 2003, the NRC staff requested Entergy to acknowledge certain conditions for approval of the above relaxation requests. Entergy concurs with the following condition as applied to the bare metal visual examination relaxation request for ANO-2 (item 1, above):

> *Should there be any evidence of corrosive product coming from any of the inaccessible areas on the reactor pressure vessel (RPV) head, the relaxation is rescinded until such time that the licensee can provide adequate information to the staff that ensures that the RPV head is not degraded in the inaccessible areas.*

Entergy concurs with the following condition as applied to analyses supporting both the CEDM nozzle and ICI nozzle relaxation requests for both ANO-2 and Waterford 3 (items 2 and 3, above):

> *Each analysis[6] incorporates a crack-growth formula different from that described in Footnote 1 of the Order, as provided in EPRI Report MRP-55. Entergy is aware that the NRC staff has not yet completed a final assessment regarding the acceptability of the EPRI report. If the NRC staff finds that the crack-growth formula in MRP-55 is unacceptable, Entergy shall revise its analysis that justifies relaxation of the Order within 30 days after the NRC informs Entergy of an NRC-approved crack-growth formula. If Entergy's revised analysis shows that the crack growth acceptance criteria are exceeded prior to the end of the operating cycle which follows the current refueling outage[7], this relaxation is rescinded and Entergy will, within 72 hours, submit to the NRC written justification for continued operation. If the revised analysis shows that the crack growth acceptance criteria are exceeded during the subsequent operating cycle, Entergy shall, within 30 days, submit the revised analysis for NRC review. If the revised analysis shows that the crack growth acceptance criteria are not exceeded during either the upcoming operating cycle or the subsequent operating cycle, Entergy shall, within 30 days, submit a letter to the NRC confirming that its analysis has been revised. Any future crack-growth analyses performed for the upcoming operating cycle and future cycles for RPV head penetrations will be based on an NRC-acceptable crack growth rate formula.*

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[3] Originally submitted via Entergy letter CNRO-2003-00038 dated September 15, 2003 and supplemented via letter CNRO-2003-00049 dated September 26, 2003.

[4] Originally submitted via Entergy letter CNRO-2003-00035 dated September 3, 2003 and supplemented via letters CNRO-2003-00040 dated September 12, 2003, CNRO-2003-00046 dated September 24, 2003, and CNRO-2003-00048 dated September 26, 2003.

[5] Originally submitted via Entergy letter CNRO-2003-00042 dated September 18, 2003 and supplemented via letters CNRO-2003-00045 dated September 24, 2003 and CNRO-2003-00048 dated September 26, 2003.

[6] Submitted in Entergy letters CNROs-2003-00033, -00035, -00038, and -00042.

[7] Operating Cycle 17 for ANO-2 and Operating Cycle 13 for Waterford 3.

Regarding the relaxation requests for the ICI nozzles (item 3, above), Entergy has identified two (2) typographical errors each appearing in Entergy letters CNRO-2003-00045 and CNRO-2003-00046, as described below:

- CNRO-2003-00045: On page 3 of 20 of Enclosure 1, the first sentence of Section III.C references the CEDM nozzles rather than the ICI nozzles. The sentence is corrected to read, "The inspection probe to be used to inspect the Waterford 3 ICI nozzles consists of seven (7) individual transducers."

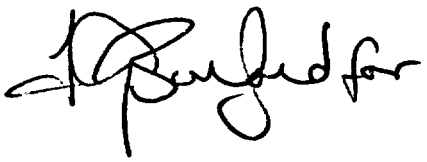
- CNRO-2003-00046: On page 3 of 20 of Enclosure 1, the first sentence of Section III.C references the Waterford 3 CEDM nozzles rather than the ANO-2 ICI nozzles. The sentence is corrected to read, "The inspection probe to be used to inspect the ANO-2 ICI nozzles consists of seven (7) individual transducers."

This information has no impact on the technical information presented in the letters.

This letter contains six commitments identified in the enclosure. Commitments 2 through 6 supercede those commitments listed as items 2 through 6 in Entergy letters CNROs-2003-00033, -00035, -00042, -00045, and -00046.

If you have any questions or require additional information, please contact Guy Davant at (601) 368-5756.

Sincerely,



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Enclosure: Licensee-Identified Commitments

cc: Mr. C. G. Anderson (ANO)
Mr. W. A. Eaton (ECH)
Mr. J. E. Venable (W3)
Mr. G. A. Williams (ECH)

Mr. T. W. Alexion, NRR Project Manager (ANO-2)
Mr. R. L. Bywater, NRC Senior Resident Inspector (ANO)
Mr. M. C. Hay, NRC Senior Resident Inspector (W3)
Mr. N. Kalyanam, NRR Project Manager (W3)
Mr. B. S. Mallett, NRC Region IV Regional Administrator

ENCLOSURE

CNRO-2003-00050

LICENSEE-IDENTIFIED COMMITMENTS

LICENSEE-IDENTIFIED COMMITMENTS

COMMITMENT[1]	TYPE (Check one)		SCHEDULED COMPLETION DATE
	ONE-TIME ACTION	CONTINUING COMPLIANCE	
1. Should there be any evidence of corrosive product coming from any of the inaccessible areas on the reactor pressure vessel (RPV) head, the relaxation is rescinded until such time that the licensee can provide adequate information to the staff that ensures that the RPV head is not degraded in the inaccessible areas.	✓		Prior to heatup from ANO-2 refueling outage 2R16.
2. If the NRC staff finds that the crack-growth formula in MRP-55 is unacceptable, Entergy shall revise its analysis that justifies relaxation of the Order within 30 days after the NRC informs Entergy of an NRC-approved crack-growth formula.	✓		Within 30 days after the NRC informs Entergy of an NRC-approved crack-growth formula.
3. If Entergy's revised analysis shows that the crack growth acceptance criteria are exceeded prior to the end of the operating cycle which follows the current refueling outage, this relaxation is rescinded and Entergy will, within 72 hours, submit to the NRC written justification for continued operation.	✓		Within 72 hours from completing the revised analysis in #2, above.
4. If the revised analysis shows that the crack growth acceptance criteria are exceeded during the subsequent operating cycle, Entergy shall, within 30 days, submit the revised analysis for NRC review.	✓		Within 30 days from completing the revised analysis in #2, above.
5. If the revised analysis shows that the crack growth acceptance criteria are not exceeded during either the upcoming operating cycle or the subsequent operating cycle, Entergy shall, within 30 days, submit a letter to the NRC confirming that its analysis has been revised.	✓		Within 30 days from completing the revised analysis in #2, above.
6. Any future crack-growth analyses performed for the upcoming operating cycle and future cycles for RPV head penetrations will be based on an NRC-acceptable crack growth rate formula.		✓	N/A

[1] Commitment #1 is applicable to ANO-2, only. Commitments 2 – 6 are applicable to both ANO-2 and Waterford 3.